DOCUMENT RESUME

ED 242 146 EC 162 116

TITLE	Math: Objectives Guide. Project CAST.
INSTITUTION	Charles County Board of Education, La Plata, MD. Office of Special Education.
SPONS AGENCY	Office of Special Education and Rehabilitative Services (ED), Washington, DC. Div. of Innovation and Development.
PUB DATE	[81]
GRANT	G007804955
NOTE	55p.; For related documents, see EC 162 109-117.
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Adjustment (to Environment); *Behavioral Objectives; Budgeting; *Daily Living Skills; *Disabilities; *Mathematics Skills; Measurement; *Money Management; Secondary Education; Student Educational Objectives; Time
IDENTIFIERS	*Project Community and School Together

ABSTRACT

The guide lists math objectives needed for independent living by secondary special education students. One of a series of Project CAST (Community and School Together) life skills manuals, the guide outlines basic competencies in terms of goal statements, behavioral objectives, and specialized vocabulary for the following areas: money, making change, paychecks, budgeting, banking services, savings accounts, checking accounts, loans and credit, comparative shopping, taxes, time, linear measurement, liquid and dry measurement, measuring temperature, measurement devices for the operation of a vehicle, graphs and charts, and determination of clothing sizes. A list of resource materials with brief summaries and publisher information concludes the document. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED242146

Objectives Guide

for

MATH

Project CAST

Charles County Board of Educatior Office of Special Education

La Plata, Maryland 20646

EC162116

This guide was prepared under the direction of Ms. Irene R. Potosky. The following people contributed to the development of this guide:

Mr. George Benbow
Mrs. Bobby Biddle
Mrs. Joyce Carter
Mrs. Barbara Diep
Mrs. Tricia Dunleavy
Mrs. G. G. Evey
Mr. James Forcum
Mrs. Stephanie Fulk
Mrs. Carolyn Graham
Mrs. Pat Greenfield
Mrs. Rosellen Harmon
Mr. James Harr
Mrs. Peggy Heinrichs
Ms. Susan Herbert
Mrs. Kathy Hettle
Mrs. Linda Kerr
Mr. Edward Lakes
Mr. Gordon Lew
Mr. John Lunny
Mrs. Diane Murphy
Ms. Mimi Reagon
Ms. Sally Roesner
Ms. Nancy Rosen
Dr. Muriel Schiavoni
Ms. Kim Sexton
Mr. Jerry Shaffer
Mrs. Annie Townes
Ms. Jane Williams
Mrs. Evelyn Winfield

Connie Rawlings, typist

Special thanks to Dr. Carol Johnson, Ms. Corrine McGuigan, Mr. Steve Hyre, and the Program Development Assistance System for assistance in the development of these units.

CHARLES COUNTY BOARD OF EDUCATION

Mr. Jesse L. Starkey, Superintendent
Mr. John H. Bloom, Deputy Superintendent
Mr. James Campbell, Director of Secondary Education
Dr. Anne Jameson, Director of Elementary Education
Dr. Herbert Mitchell, Director of Federal Programs
Dr. Eileen Oickle, Director of Curriculum and Staff Development
Mr. Robert Pender, Director of Pupil Services

Mrs. Katherine Blix, Supervisor of Special Education

The Project CAST Life Skills Objective Guides were developed through monies awarded to the Charles County Board of Education by the United States Education Department, Office of Special Education and Rehabilitative Services, under Grant number G007804955. The opinions expressed herein do not necessarily reflect the position or policy of the Education Department and no official endorsement by the Education Department should be inferred.

Division of Innovation and
Development

Introduction

The Project CAST Life Skills Objective Guides have been developed to assist special education teachers in planning individualized education programs for high school age mildly to moderately educationally handicapped students. The set of five guides covers the math, health/science, language arts, social studies, and career development areas.

The Objective Guides identify and document basic competencies which are important to independent living. Basic academic skills are seldom presented. Users of the guides are strongly urged to seek other sources to obtain competency listings and activities for these areas.

Organization of the Guides

content area

Project CAST Life Skills Objective Guides are available for five areas: math, health/science, language arts, social studies, and career development.

unit

Each objective guide includes several life skills units. Each unit contains one general goal statement and several specific objectives.

goal statement (gs)

Each goal statement describes, in general terms, the behavioral outcomes desired for the unit.

objective

Objectives describe the competencies which should be mastered to achieve that which is intended by the "goal statement".

vocabulary

Specialized vocabulary words are provided for many units. These are some of the terms that teachers and students may need to define prior to usage.

resources

A cursory list of instructional resources are included for each content area.

Using the Guides

1. The math, health/science, social studies, and language arts guides present a continuum of objectives which should be taught from grades nine through twelve.

2. The career development guide is divided into four sections with each section matching a Project CAST program phase (Career Awareness, Career Exploration, Career Investigation, and On-The-Job Training). Students should be taught the career development objectives which match their Project CAST phase placement.

3. Although most of the objectives represent minimal competencies essential for independent living, it is not expected that all of the objectives will be mastered. Teachers will need to prioritize the accomplishment of objectives according to each student's individual needs and strengths.

4. Objectives which interrelate should be taught simultaneously.

5. Criteria and conditions for mastery of each objective should be developed on an individual basis.

MATH

Money 1
Making Change 3
Pay 4
Budgeting 6
Banking Services 8
Savings Accounts 9
Checking Accounts 11
Loans and Credit 13
Comparative Shopping 15
Taxes 18
Time 20
Linear Measurement 24
Liquid and Dry Measurement 26
Measuring Temperature 28
Measurement Devices for the Operation of a Vehicle . . . 30
Graphs and Charts 32
Determining Clothing Sizes 33

Resources 34

Money

GS: *The student will demonstrate an understanding of the value of money.*

objectives

1. The student will identify and state the value of the six (6) U.S. coins (penny, nickel, dime, quarter, half dollar, and dollar).
2. The student will identify and state the value of seven (7) U.S. currency denominations ($1, $2, $5, $10, $20, $50, and $100).
3. The student will demonstrate an understanding of the value of each coin by identifying equivalent combinations of coins.
4. The student will demonstrate an understanding of the value of each of the seven (7) U.S. currency bills by identifying equivalent combinations of currency.
5. The student will demonstrate an understanding of the value of currency and coin combinations by identifying currency and coin combination equivalent to a stated amount.
6. The student will identify and state the names and meaning of the symbols "$", ".00", and "¢".
7. The student will identify the words and numerals for each U.S. coin and currency value.
8. The student will demonstrate his/her understanding of the use of symbols and numerals by writing the correct form of monetary value (10¢ and $.10).
9. Given a set of coins, both the same and different, the student will write the corresponding value of each coin, add the value of each, and derive the sum total value of the coins.
10. Given a set of bills, both the same and different, the student will write the corresponding value of each bill, add the value of each, and derive the sum total value of the bills.

objectives (cont.)

11. Given a set of bills, both the same and different, and a set of coins, alike and different, the student will write the corresponding value of each, the value of each, and derive a sum total value of the coins and bills in combination.

Note: Begin with coins only and lesser values and progress to currency and coin combinations and to more complex, greater values.

SPECIALIZED VOCABULARY

value	currency	coins
money	foreign money	penny
nickel	half dollar	quarter
dollar	denomination	amount
sum	combination	bills
purchase	greater value	buy
sell	lesser value	loan

Making Change

GS: *The student will make correct change and know the correct amount of change to be received as a result of a purchase.*

objectives

1. The student will state that change is the difference between the amount of money something costs and the amount of money given.
2. The student will determine the correct amount of change he/she should receive given the purchase price and the amount of money paid for an item.
3. The student will write the name and numerical representation for the money involved in a transaction.

Note: Begin with coins only and lesser values and progress to currency and coin combinations and to more complex, greater values.

SPECIALIZED VOCABULARY

count
nickel
cent
receipt
"rip off"
sale
currency
decimal

dollar
dime
quarter
silver dollar
half dollar
check out
cash register
over ring
short changed
difference

dollar sign
penny
checking
cashier
cost
budget
inflation

Pay

GS: *The student will demonstrate an understanding of each component of his/her pay.*

objectives

1. When given a completed paycheck, the student will identify the information available on the check and its stub including:
   a. date of the check
   b. person to whom check is made out
   c. person/firm issuing check
   d. amount of check
   e. number of hours worked during the pay period
   f. deductions; federal, state, social security, other
   g. gross salary
   h. net salary
2. The student will describe the different methods of pay, that is; receiving by the hour, by a salary, by the piece (piece rate), commissions.
3. Given starting and quitting times, the student will compute the number of hours worked in one day, week, and/or pay period.
4. The student will define the term gross pay and compute gross salary per day, week, and pay period (formula: gross pay = hourly rate x hours).
5. The student will identify the deductions which are standard and non-standard, and identify the following deductions:
   a. federal income tax
   b. state income tax
   c. FICA (social security)
   d. medical insurance
   e. retirement
   f. union dues
   g. credit union

objectives (cont.)

6. The student will compute net pay for a given pay period using the formula, net pay = gross pay - deductions, when given the deductions to be subtracted.

7. Given the hourly pay rate, the number of hours worked during a week, and the overtime rate, the student will compute gross salary with overtime wages.

SPECIALIZED VOCABULARY

pay
due
earned
union
credit
pay period
gross pay
wages

pay check
check stub
deductions
withholding
retirement
union dues
credit union
insurance
social security

salary
gross
net
F.I.C.A.
net pay
pay rate
overtime
taxes

Budgeting

GS: *The student will demonstrate an understanding of the purposes and advantages of budgeting and be able to construct a budget for personal use.*

objectives

1. The student will define the term "budget". (A budget is a means for determining how much money one can spend within a time period based on how much money one earns during that same time period. It is a method of planning.)
2. The student will identify the benefits of budgeting (helps manage money, save money, and plan for large expenditures).
3. The student will define the basic vocabulary/concepts involved in the budgeting process, including:
   a. income (amount of money one earns)
   b. expenditures (term for expenses one incurs)
   c. budget plan (plan one develops to monitor spending based on income)
4. The student will list the essential parts of a budget (the income, required expenditures, and dates for each).
5. The student will describe "fixed expenses" and "other expenses" by categorizing examples of each.
   a. fixed expenses: insurance, rent, mortgage, transportation, food
   b. other expenses: utilities, clothes, household, health
6. The student will interpret bills and describe the process for payment.
7. The student will design a viable budget for self at the present time and for a specified time in the future.

SPECIALIZED VOCABULARY

budget	spending	earn
expenses	planning	money

SPECIALIZED VOCABULARY
(continued)

shortage
income
utilities

accounting
fixed expenses
transportation
miscellaneous
household expenses
health expenses
medical expenses

benefits
food
insurance
mortgage

Banking Services

GS: *The student will demonstrate an understanding of general banking services.*

objectives
1. The student will cite the general function of banks.
2. The student will identify the specific bank services available to customers (safe deposit, checking, loan, etc.).
3. The student will identify method(s) for selecting a bank(s) suited to his/her needs (e.g., distance factor).

SPECIALIZED VOCABULARY

banking
account
loans
balance
safe

bank services
safe deposit box
withdraw
check stub
insufficient funds
travelers check
cashiers check
Christmas Club
personalized check

checking
overdrawn
money orders
deposit
check

Savings Accounts

GS: *The student will understand the purpose of and know how to use savings accounts.*

objectives

1. The student will define "savings account" and will cite the purpose of such accounts (method of saving money, protection for ones money, method of making more money).

2. The student will demonstrate an understanding that different types of savings accounts are available at different rates of interest and with different conditions.

3. The student will perform the tasks necessary for opening and using a savings account:

    a. complete savings account application
    b. cite appropriate questions to ask prior to opening a savings account at a particular bank (rules and regulations, rate of interest, method of computing interest, minimum amount required to open an account, minimum balance allowed, service charges, etc.)
    c. complete deposit slip and cite the process for deposit transaction (from consumers point of view)
    d. complete withdrawal slip and cite the process for withdrawal transactions (consumers view)
    e. identify procedures necessary in the event of a lost passbook
    f. cite procedures for closing a savings account

SPECIALIZED VOCABULARY

interest	rate of interest	credit
teller	service charge	receipt
charges	savings account	application

SPECIALIZED VOCABULARY
(continued)

blank check
transaction
passbook
signature
cash a check

joint account
minimum amount
cancelled check
individual account
monthly statement

deposit slip
withdrawal
local banking
statement

Checking Accounts

GS: *The student will understand the purpose of and know how to use checking accounts.*

objectives

1. The student will cite the benefits of checking account use (convenience, protection of cash, receipt for purchases).

2. The student will identify the types of checking accounts available (example: individual versus joint, service charge versus no service charge, etc.); the advantages and disadvantages of each.

3. The student will cite the importance of keeping checks in a safe place and reporting a lost or stolen check, as well as possible consequences for not doing so.

4. The student will perform the tasks necessary for opening and using a checking account:

    a. complete an application
    b. complete a signature card
    c. identify account number
    d. identify/label all parts of a check
    e. complete blank check (when given payee and amount of check)
    f. identify parts of check register or stub
    g. record check information on stub/register
    h. identify all parts of the deposit slip
    i. record/complete information on deposit slip
    j. maintain a cumulative balance in check register/stub by adding deposits and subtracting checks and service charges
    k. identify each section of a monthly statement
    l. check bank statement using cumulative record of check activity
    m. perform tasks necessary for cashing a check: endorsement, counting cash exchanged for check, etc.
    n. cite procedures for closing a checking account

SPECIALIZED VOCABULARY

individual
balance
deposit
number
stub
deficit

service charge
account number
signature
deposit slip
endorsement

joint
branch
check
register
statement

Loans and Credit

GS: *The student will understand the purpose of and know how to use loans and credit.*

objectives

1. The student will define the term bank loan.
2. The student will identify the process for applying for a loan.
3. The student will be able to define collateral.
4. The student will identify the legal obligations and responsibilities associated with securing a loan.
5. The student will define the term credit.
6. The student will cite reasons/instances for credit (large purchase need, cash not immediately available).
7. The student will demonstrate an understanding of the processes and procedures for using credit (various types and sources):
    a. identifying types and sources of credit
       types: credit cards (national, local and store credit cards); loans
       sources: bank, credit union, national and local charge card companies, local stores, finance companies
    b. identifying the interest rates, conditions, and regulations inherent per source and type of credit
    c. selecting an appropriate source and type of credit for application
    d. applying for credit (including completion of forms, credit checks, etc.)
    e. receiving credit (including forms, statements, etc.)
    f. re-payment of credit (conditions, schedules, and ways to re-pay)

objectives (cont.)

g. consequation of non-payment of borrowed money (failure to meet stated installments, and/or failure to re-pay, period!)
h. stating responsibility and course of action when credit card has been lost or stolen

SPECIALIZED VOCABULARY

loan
repay
investment
debt
credit check
Credit Bureau

bank loan
bank credit
loan application
loan officer
bank officer
application
interest rate
credit cards
credit union
finance companies
student loan
credit rating
loan conditions
non-payment

credit
security
purchase
cash
borrow
collateral

Comparative Shopping

GS: *The student will demonstrate comparative shopping techniques when purchasing goods and services (such as, purchasing an automobile, furniture, appliances, food . . .).*

objectives

1. The student will define the term "consumer" and illustrate situations in which he/she is a consumer.
2. The student will define the terms "goods" and "services" and categorize a list of goods and services.
3. The student will differentiate between needs and desires regarding goods/services.
4. The student will define the term "comparative shopping".
5. The student will identify factors to consider when purchasing specific goods and services (e.g., quantity, quality, cost, convenience, need, long range versus short range use).
6. The student will compare the advantages and disadvantages of leasing and purchasing goods.
7. The student will identify agencies and reference material available to assist the consumer.
8. The student will compare the cost of different brands of the same item (e.g., 1 pound loaf of Wonder Bread versus 1 pound loaf of Sunbeam White Bread).
9. The student will compare the cost of different sizes of like items.
10. The student will compare the cost, quality, and quantity (size) of similar items of differing brands.
11. The student will compare the cost, quantity, and nutritional value of different foods.
12. The student will compute to compare the long range versus the short range costs of various items.
13. The student will identify the resources available in determining where to purchase goods and services.

objectives (cont.)

14. The student will identify the stores/agencies which offer the best buying options for specific types of products/ services (e.g., cheaper prices, better/longer warranty, cost-free service contracts).

15. The student will develop strategies for buying goods and services at a discount (means, places, times of the year).

16. The student will identify factors which determine the quality of goods and services.

17. The student will describe situations in which lower cost and less quality items may be wiser purchases instead of higher cost and better quality items (e.g., short time use).

18. The student will identify items in which higher quality (and possible greater cost) is important.

19. The student will describe the benefits of planned versus impulse buying.

20. The student will describe how goods/services shortages effect price.

21. The student will explain the effect of advertising gimmicks on goods/services pricing (e.g., rebates, coupons).

22. The student will identify alternative strategies for buying and using goods/services that have increased drastically in cost (e.g., substitute purchases, sharing goods/ services).

23. The student will evaluate descriptive information to determine that which is real versus persuasive (e.g., a beautiful, carefree dress).

24. The student will identify misleading advertising techniques used in media (e.g., bait and switch, supply limited, going out of business, close out).

25. The student will analyze descriptive advertising information to determine propaganda gimmicks versus information in various media sources (e.g., TV, radio, newspaper).

objectives (cont.)

26. The student will read to understand the conditions in warranties and guarantees for goods/services.

27. The student will describe the obligations and responsibilities of the seller and purchaser under various sales agreements (e.g., used items, "as is") for purchase and return of items.

28. The student will identify the steps to take to return unwanted and/or defective goods (including items received through the mail).

29. The student will describe the process to register a complaint regarding goods/services (e.g., to the seller, Better Business Bureau, consumer protection agencies).

SPECIALIZED VOCABULARY

compare
services
needs
advertise
products
shortages
seller
unit pricing
purchase
protection
quality
nutritional value
name brands
propaganda
warranties
guarentees
sales agreement
food dating
consumer
goods
quantity
economy
labels
coupons
purchaser
desires

Taxes

GS: *The student will demonstrate an understanding of how to compute and pay taxes.*

objectives
1. The student will identify the various types of taxes and describe their purposes.
2. The student will cite examples of sales taxable and non sales taxable items in the State (e.g., all food except candy and soft drinks are non taxable, paper goods and cosmetics are taxable).
3. The student will identify his/her State sales tax rate and cite that each state sets its own rate and conditions.
4. The student will locate the correct amount of sales tax due when given an item's cost and a sales tax chart.
5. The student will calculate the total price, including tax, when given a list of items and their cost.
6. The student will complete descriptive and biographical information on the state and short form federal tax return applications.
7. The student will identify resources to use and places to go to get assistance in completing income tax forms.
8. The student will compute and complete state and federal income tax returns.

SPECIALIZED VOCABULARY

compute	signature	taxable
taxes	tax rate	sales
income	W-2 form	state

SPECIALIZED VOCABULARY
(continued)

federal
salary
divorced
treasury
exemptions
refund

tax returns
deductions
dependents
Internal Revenue
joint return
withholding

single
married
balance
occupation
dividends

Time

GS: *The student will measure time.*

objectives

1. The student will state the number of and name the days of the week in sequence.
2. The student will state the number of and name the months of the year in sequence.
3. The student will name the four seasons.
4. The student will cite the number of weeks and days in the year.
5. Given a calendar, the student will identify it by its name and purpose.
6. Given a clock face, the student will identify it by name and purpose.
7. Given a clock face, the student will identify the minute hand and the hour hand.
8. Given a clock face, set to the hour, the student will indicate the correct time.
9. Given a clock face set to the half hour, the student will indicate the correct time.
10. Given a descriptive picture, the student will recognize the appropriate season of the year.
11. The student will identify/write the days of the week, months of the year, seasons, and their abbreviations.
12. Given a calendar (one month), the student will cite the day and date indicated by a specific marking .

objectives (cont.)

13. Given a twelve (12) month calendar, the student will indicate the number of days in a specific month.

14. Given a one (1) month calendar, the student will identify the number of times a given day of the week occurs in a month.

15. Given a one (1) month calendar, the student will indicate on which day of the week a specific date will fall.

16. Given a calendar, the student will indicate on which date a specific day will fall.

17. Given a description of a daily activity, the student will identify the activity as occurring in the morning, afternoon, evening, or night (e.g., eating dinner = evening).

18. Given a clock face set to the quarter hour, the student will indicate the correct time.

19. Given a clock face or a digital clock set to the minute, the student will indicate the correct time.

20. Given a clock with the alarm set to the quarter hour, the student will indicate the time at which it will ring.

21. The student will set the clock alarm for a designated time (to the quarter).

22. The student will cite the following equivalencies:

    a. 60 seconds = 1 minute
    b. 60 minutes = 1 hour
    c. 24 hours = 1 day
    d. 7 days = 1 week
    e. 4 weeks = 1 month
    f. 12 months = 1 year

23. Given a written or verbal example of times of the day, the student will identify/write whether the times occur in the a.m. or p.m.

24. The student will write the time shown on a clock using words and/or numbers (e.g., 8:23 p.m. or twenty-three minutes past eight o'clock).

objectives (cont.)

25. Given a calendar and a specific time interval with its starting date, the student will indicate the ending date of the interval.

26. Given a calendar marked with a major holiday notation, the student will identify the month represented.

27. Given a clock set to the hour, the student will indicate the time three (3) hours hence.

28. Given a clock set at the beginning of a specific time interval and given the end of that interval, the student will indicate the period between.

29. The student will set a clock to the prescribed time.

30. The student will compute correctly problems involving adding or subtracting time.

31. The student will state and write the four (4) time zones in the United States (Pacific, Mountain, Central, Eastern) and given the time in one zone, the student will cite the time in the other three (3) zones.

32. The student will define daylight savings time.

33. The student will budget time and meet a daily schedule.

SPECIALIZED VOCABULARY

seconds	starting time	minutes
hours	ending time	Sunday
clock	time zones	Monday
o'clock	daylight savings time	Tuesday
days	schedule	Wednesday
weeks	morning	Thursday
date	afternoon	Friday
months	evening	Saturday
seasons	night	January

SPECIALIZED VOCABULARY
(continued)

Summer
Winter
Fall
Spring
calendar
weekly
monthly
yearly
annual
holiday
birthday
plan

day
a.m.
p.m.
tomorrow
yesterday
digital
alarm
quarter-hour
half-hour
leap year

February
March
April
May
June
July
August
September
October
November
December

Linear Measurement

GS: *The student will utilize the instruments involved with linear units of measurement to demonstrate his/her understanding of linear measurement concepts.*

Objectives

1. Given a measurement device, the student will identify it by name and purpose.
2. Given a ruler, the student will identify the marks indicating each specific unit measurement: yard, foot, inch, half-inch, quarter-inch, meter, centimeter, and millimeter.
3. The student will write the words, notations, and abbreviations for each of the following units of measurement:
   a. inch
   b. foot
   c. yard
   d. mile
   e. millimeter
   f. centimeter
   g. meter
   h. kilometer
4. Given a ruler and a line, the student will measure the line to the nearest identified unit.
5. Given several written examples of linear measures, the student will perform conversions within the designated system [example: 1' (foot) = 12" (inches)].
6. The student will cite the appropriate unit to be used to measure a specific item (e.g., football field, book, etc.).
7. Given the length of the side of a figure, the student will be able to compute its perimeter.
8. Given the length of a side of a square, the student will be able to compute its area.
9. Given an object/person, the student will estimate the height of the object/person.

SPECIALIZED VOCABULARY

measure	yardstick	ruler
inch	round off	yard

SPECIALIZED VOCABULARY
(continued)

foot	millimeter	meter
length	centimeter	width
height	kilometer	miles

Liquid and Dry Measurement

GS: *The student will utilize the instruments involved with liquid and dry units of measurement to demonstrate his/her understanding of the required concepts.*

objectives

1. Given a measuring cup, the student will indicate appropriate markings for each unit of measurement within the designated system (one cup, one-half cup, one-quarter cup, three-quarters cup, one-third cup, two-thirds cup; liter, milliliter, etc.).

2. Given a measuring cup, some liquid, and a written/verbal statement of the amount of liquid desired, the student will measure the required amount.

3. The student will write the written equivalents in words, abbreviations, and numbers of each of the measurement units (example: one-third cup = 1/3 cup = 1/3 c).

4. Given a set of measuring spoons in units of 1 tablespoon, 1 teaspoon, 1/2 teaspoon, 1/4 teaspoon, the student will:

    a. identify each by name
    b. write the words, abbreviations, and symbols notating the measure
    c. measure amounts of an ingredient

5. Given a scale, the student will identify markings according to the designated measurement system (examples: one ounce, one pound, one-quarter pound, one-half pound, three-quarters pound, x pounds; one kilogram, one gram, etc.).

6. Given a scale and appropriate materials, the student will measure quantities of substances according to the designated measurement system,

objectives (cont.)

7. The student will state and write his/her own weight.

8. The student will estimate the weight of another person or inanimate object.

SPECIALIZED VOCABULARY

liquid
kiloliter
liter
milliliter
scale
balance
equal
peck
gram
measuring cups
measuring spoons
one cup
one-half cup
one-third cup
one-quarter cup
tablespoon
teaspoon
kilogram
dry
gallon
quart
pint
glass
ounce
bushel
pound

Measuring Temperature

GS: *The student will use a variety of devices to measure temperature.*

objectives

1. The student will identify a thermometer by name and purpose.
2. Given a stated Fahrenheit or Celsius temperature, the student will state its relative comfort (i.e., cold, cool, hot, warm).
3. Given a thermometer, the student will determine the temperature indicated using both the Fahrenheit and Celsius scales.
4. Given the question of a desirable room temperature, the student will state a comfortable temperature in both Fahrenheit and Celsius scales.
5. The student will differentiate between a room or outside thermometer and thermometers used for cooking or body temperature measurement.
6. Given a thermometer or a thermostat, the student will read the registered temperature.
7. The student will identify the normal body temperature for a healthy person and the temperature(s) which signify the presence of illness or disease.
8. Given a temperature reading, the student will state the meaning of the symbol "°".
9. The student will read to determine the temperature set on an oven dial.

objectives (cont.)

10. The student will set an oven dial to a given temperature.

11. The student will read meat and candy thermometers to determine when foods are cooked to specifications.

SPECIALIZED VOCABULARY

thermometer
thermostat
degrees

temperature
body temperature
outside temperature
cooking temperature
meat thermometer

comfort
register
oven dial

Measurement Devices For The Operation Of A Vehicle

GS: *The student will demonstrate an understanding of the use of measurement devices in the operation of a vehicle.*

Objectives

1. The student will identify the speedometer, tachometer, odometer, and gas gauge on a vehicle; state the name and purposes of each.
2. The student will determine the number of miles per hour indicated on a speedometer.
3. The student will read and write the amount of mileage indicated on an odometer.
4. The student will calculate the number of miles traveled (e.g., Jack's odometer read 60266.5 miles in the morning. After he drove to work, his odometer read 60300.5. How many miles did he have to drive to work?).
5. The student will estimate the amount of gasoline in his/her gas tank using the gas gauge (e.g., 1/2 tank, 1/4 tank, etc.).
6. The student will estimate the number of miles he will be able to travel on a tank of gas when given the miles per gallon and the number of gallons his tank holds.
7. The student will determine tire pressure and calculate the amount of air needed to add or decrease.
8. The student will determine the amount of gasoline registered on a gasoline pump meter.

SPECIALIZED VOCABULARY

speeding	speed limit	slow
warning	flammable	caution

SPECIALIZED VOCABULARY
(continued)

fast
danger
calculate
decrease
register

tire pressure
speedometer
odometer
gas gauge
miles per hour
amount of air
gasoline pump

travel
gallons
pressure
increase
gas meter

Graphs And Charts

GS: *The student will read and interpret charts and graphs.*

objectives
1. The student will gain information using simple bar, line, picture, and circle graphs. 2. The student will use tables to secure information (such as bus, train, and map mileage tables).

SPECIALIZED VOCABULARY

graph	mileage tables	tables
estimate	approximate	exact
amount		chart

Determining Clothing Sizes

GS: *The student will demonstrate an understanding of measurement as it pertains to sizing clothes.*

objectives

1. The student will explain the various types of clothing sizes and measures.
2. The student will read labels and tags to select appropriate sizes of clothing.
3. The student will use measurement charts to identify correct sizes of clothing.

SPECIALIZED VOCABULARY

clothes	clothing	garment
small	medium	large
length	extra large	waist
alter	tailor	adult
junior	clothing label	mens
sizes	manufacturers	boys
ladies	sleeve length	womens
shoes	inseam	bust
chest	over size	pants
blouse		coat
shrink		petite

RESOURCES: Math

RESOURCES

MATH

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
MONEY MAKES SENSE	activity book	Lakeshore Curriculum Materials Company 2695 E. Dominquez Street Box 6261 Carson, California 90749	Puzzles and games.
MONEY MATTERS ACTIVITY CARDS	task cards	Lakeshore Curriculum Materials Company 2695 E. Dominquez Street Box 6261 Carson, California 90749	Individualized activities for learning about money - using coins and bills.
SKILLS FOR LIVING UNIT 3 ON THE JOB	unit contains 150 pages of reproducible lessons, forms, work sheets, cartoons, role playing activities, performance evaluation	MacMillan Arts and Crafts 9645 Gerwig Lane Columbia, Maryland 21046	interest level: 7 - 12 reading level: 4.5 - 5.5 Humorous lessons follow Harvey Crumbaker, teenager. High interest lessons encourage students to practice math operations required for 20 life skills.
USING CONSUMER MATH	cassette - activity unit, reproducible post-tests	Lakeshore Curriculum Materials Company 2695 E. Dominquez Street Box 6261 Carson, California 90749	interest level: 7 - 12 reading level: 3.5 - 4.5 Lessons cover: buying the food you need, how much do you have to spend?, using a charge account, paying by check, saving and investing, buying or renting, insurance.

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
GETTING THE GROCERIES	cassette and activity sheets, teacher's manual	MacMillan Arts and Crafts 9645 Gerwig Lane Columbia, Maryland 21046	interest level: 7 - 12 reading level: 2.5 - 4.5 How to read food ads, recipes, menus, comparison shopping.
PAYING YOUR BILLS	cassette and activity sheets, teacher's manual	MacMillan Arts and Crafts 9645 Gerwig Lane Columbia, Maryland 21046	interest level: 7 - 12 reading level: 2.5 - 4.5 Topics include: reading and understanding bills, using checking and savings accounts.
BUYING WHAT YOU NEED	cassette and activity sheets, teacher's manual	MacMillan Arts and Crafts 9645 Gerwig Lane Columbia, Maryland 21046	interest level: 7 - 12 reading level: 2.0 - 5.0 How to prepare a budget, read labels, comparison shop, interpret ads, understand credit.
RIGHTS AND DUTIES OF CITIZENS	transparencies, work texts	Frank E. Richards Publishing Company, Inc. Box 66 Phoenix, New York 13135	Designed for special needs students. Competency based: variety of forms: social security, personal data, pay check stub, budgets, checks and deposits, selective service forms, workmen's compensation.

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
MONEY MANAGEMENT: EARNING, SPENDING, BORROWING, SAVING, BUDGETING, GUIDE TO TEACHING	multi-media kit: cartoons, bulletin board project, attitude inventory, transparency masters, role playing book, resource list	EMC Corporation 180 E. Sixth Street Saint Paul, Minnesota 55101	interest level: secondary, post-secondary. 5 units to help prepare to earn and use money wisely.
LET'S GO SHOPPING	2 full color film strips, 2 LP records/ cassettes, 12 line masters, resource list, review exercises	EMC Corporation 180 E. Sixth Street Saint Paul, Minnesota 55101	interest level: secondary, post-secondary. Comparison shopping: helps students formulate values and develop decision making skills.
GETTING YOUR MONEY'S WORTH	full color film strip	SVE Society for Visual Education 1345 Diversy Parkway Chicago, Illinois 60714	interest level: intermediate, junior high. Full color photographs, consumer case studies: why you need consumer know how, a blue print for money management, buying wisely, making credit work for you, saving to reach your goal, let the buyer beware.
MAKING ENDS NEET	film strips discussion guide	Guidance Associates 757 Third Avenue New York, New York 10017	Structures a model family budget, organizing orderly allocation and limits.

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
BASIC MATH SKILLS FOR EVERYDAY LIFE	6 film strips 3 cassettes	Eye Gate Media 146-01 Archer Avenue Jamaica, New York 11435	level: junior and senior high Designed for students taking survival courses with low math skills. Content includes: eating out, comparison shopping, budget basics, planning a trip.
HOW MUCH, HOW FAR, HOW MANY: PROGRAM IN BASIC MANAGEMENT	multi-media kit: cassettes, film strips	Singer Education Division Career Systems 80 Commerce Drive Rochester, New York 14623	Designed for special needs and normal achievers: linear measurement, multiplication, metric, volume, weight, temperature, time, angles, area measurement; a self paced program.
PERSONAL MONEY SERIES	7 reading modules: 30 illustrated books, 1 read-a-long cassette, 30 skill development booklets, glossary, teacher's manual	Melton Book Company 111 Leslie Street Dallas, Texas 75207	high interest, controlled vocabulary. Lessons cover real life situations.
MONEY HANDLING	multi-media: 1 full color film strip, 1 cassette, 1 teacher's manual	Melton Book Company 111 Leslie Street Dallas, Texas 75207	interest level: high school Gives the student an awareness of money and change; a basic program for money handling skills.

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
CONSUMER MATHEMATICS	11 learning packages: performance task and taped unit lessons	Media Materials Inc. Department E 2936 Remington Avenue Baltimore, Maryland 21211	reading level: below third reader level Problems center around the world of work and consumerism; 20 minute programmed lessons.
MEASURING THE METRIC WAY	work text	Frank E. Richards Publishing Company, Inc. Box 66 Phoenix, New York 13135	Designed for special education students. Only the most common metric units: measuring length, distance, speed, weight, and temperature.
BANKING, BUDGETING, AND EMPLOYMENT	work text	Frank E. Richards Publishing Company, Inc. Box 66 Phoenix, New York 13135	Designed for special needs students.. Work text presents simplified terms and procedures for banking, budgeting, and employment.
BASIC COMPETENCY SKILLS 6	24 duplicating masters	Milliken Publishing Company St. Louis, Missouri	Basic math applications and low reading level. Competency skills for everyday living experience: graphs, maps, expenses, want ads, taxes, reading directions, making change.

MATERIAL	TYPE	PUBLISHER/CATALOG	DESCRIPTION
TEENAGERS AT WORK	work text	Frank E. Richards Publishing Company, Inc. Box 66 Phoenix, New York 13135	An introduction to a work study program for special needs students. A variety of instructional materials in English, Arithmetic, and Social Studies.

No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance, or be so treated on the basis of sex under most education programs or activities receiving Federal assistance.